University graduates choice of commute as they transition into the workplace: potential for Mobility as a Service

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Background
- The adoption and use of information and communication technologies among young adults is considered strong enough to cause a shift in preference towards public transport.
- An evolutionary concept to help with this transition is Mobility as a Service (MaaS) which is an app-based scheduling, booking and payment platform for multiple transport modes on a per trip or subscription basis.
- Students attending university are known to use sustainable modes of transport, and during this time they would have a stable context and established a routine on how they travel to university.
- When young adults start their first graduate job, this causes their context to become unstable and during this stage travel mode decisions are taken.

Objective
- To explore factors that motivate and influence university graduates choice of commute as they transition into the world of work.
- To identify the role of MaaS as a tool in supporting graduate employees to choose sustainable transport modes.

Method

Design
- The interview questions were designed on the COM-B model (capability, opportunity, motivation, behaviour) to capture the psychological capability and physical skills (enact the behaviour), physical opportunity and social opportunity (enabling the behaviour), reflective motivation and automatic motivation (activate or inhibit the behaviour) [Michie, S., Atkins, L., & West, R. (2011). The behaviour change wheel: a guide to designing interventions. 2nd ed. London: Open University Press].
- The target behaviour is engaging in public transport and shared mobility behaviour to reduce the dependency on single occupancy vehicles and to help university graduates continue with their sustainable travel behaviour as they transition into the world of work.
- The Theoretical Domains Framework was used to help unpack the COM-B further and allow deeper exploration of the barriers to and facilitators of change.

Sample

Inclusion criteria
- Graduated from a UK university in the past 3 years (2018,2019,2020)
- Lives and works in the West Midlands Region

Final Sample
- 24 university graduates with an average of 24 years without young children in the household
- 3 mature university graduates with an average age of 35 years with young children in the household
- 20 participants have a driving license of which 14 participants choose to drive to work.

Conclusions
- Participants showed good knowledge of available public transport services within their vicinity and often remarked how the availability of these services at their workplace made it easier for them to use public transport.
- Work location and nature of their job limits them in using public transport and shared mobility services.
- Participants who do not yet have a driving license expressed how they intend to learn to drive and get a license if their job requires them to have a full driving license.
- The experience of public transport while at university influences commute choices at the workplace.
- There is potential for MaaS to sustain university graduates sustainable travel as they transition into the workplace, but the service that public transport offers needs to be improved.

Qualitative Research Results
Key domains influencing public transport and shared mobility behaviour including factors facilitating or hindering the behaviour:
- Environmental context and resources: cycling infrastructure, congestion charge policy, parking fees and lack of parking spaces, cost, services not available within immediate vicinity.
- Social influence: Family and friends commenting on safety, finding support from the workplace and carsharing with friends
- Beliefs about capabilities: cost and service schedule makes public transport difficult to use, difficult to carshare because of safety, not knowing anyone who to carshare with and having to give up personal freedom.

Key domains influencing the potential use of MaaS including factors facilitating or hindering the behaviour:
- Environmental context and resources: ease of use, live travel time updates, cost effective with competitive pricing, customization, different payment options, restricted from using personal car to drive into the city centre
- Social/professional role and identity: travelling or moving across the country for work purposes, challenging for employees needing to travel to different places within one day or to rural areas, appeals to the younger generation and those that identify themselves as environmentally conscious.
- Reinforcement: all transport modes are available in one subscription, trying out new transport modes, flexible to choose any mode of transport, being rewarded for travelling sustainably.

"It all comes down to the price I guess because as most people know the trains in this country are extremely expensive so anything that can help subsidise that, that’s always going to be top priority"

"carsharing I would if there was people I knew lived near me and going to work at the same time like, I’d be more than happy to do it I’d quite like not to drive to work so that I would be quite happy with"

"If people were restricted where they could go in their cars it would potentially encourage people to find an alternative and mobility as a service sounds like a really good alternative"